



VITROLITE

"Better Than Marble"



Digitized by the Internet Archive
in 2023 with funding from
Columbia University Libraries

<https://archive.org/details/vitrolitebettert00vitr>

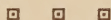
AA
8528
Y83
1917



"Better Than Marble"



EXECUTIVE OFFICES
CHAMBER OF COMMERCE BUILDING
CHICAGO



Fully equipped shops in the following cities at the architect's service:

NEW YORK CITY
BOSTON
CHICAGO
PHILADELPHIA
CLEVELAND

DETROIT
LOS ANGELES
PORTLAND
SEATTLE
SAN FRANCISCO

MINNEAPOLIS
KANSAS CITY
ST. LOUIS
CINCINNATI
COLUMBUS

HOUSTON
ROCHESTER
PARKERSBURG
ROANOKE
MONTREAL

WINNIPEG
TORONTO
LONDON
HAVANA
CHRISTIANIA

"THE PLANT BEHIND THE PRODUCT"



PARKERSBURG, WEST VIRGINIA

F O R E W O R D

Vitrolite is a manufactured material that has many distinct advantages over marble for toilet partitions, wainscoting and wall surfacing, and that is also especially well adapted for table tops and counters.

The data here presented we have endeavored to make thoroughly practical and in conformance with our understanding of what would be most useful to an Architect.

The impervious structural material is now an important one among those required in building due to the ever increasing demand for sanitation in all that pertains to the home, office and public building and hospital.

The various applications of Vitrolite together with a technical description of its nature and qualities and authentic tests comparing its physical and chemical properties with those of marble are here presented, together with complete details and specifications covering the Vitrolite Toilet Partition.

THE VITROLITE COMPANY
CHAMBER OF COMMERCE BUILDING - - CHICAGO

WHAT VITROLITE IS

VITROLITE is the product of the fusion at 3000° Fahrenheit, of Sand, Feldspar, Fluerspar, Kryolith, Silica, and several other natural ingredients which, in passing from a fluid state to that of a solid, becomes homogeneous in substance, impermeable to the absorption of foreign matter and acid-resisting. It is manufactured in the form of large slabs of various thicknesses which are subjected to a thorough process of annealing, making them tough, with a tensile strength and surface wearing qualities exceeding that of marble. Vitrolite may be had in slabs up to 50 inches in width and 10 feet in length and in thicknesses of 5/16 in., 7/16 in., 1/2 in., 9/16 in., 5/8 in., 3/4 in., 7/8 in. and 1 in.

WHY IS VITROLITE SANITARY?

Vitrolite is absolutely sanitary because it has a *natural fire* polished surface that is non-porous, therefore, non-absorbent. Glass and marble are artificially polished and therefore porous. Vitrolite will not react with alkalis or any acid except hydrofluoric. The surface of Vitrolite has a greater abrasive resistance than marble. Vitrolite is homogeneous and does not craze and its depth of rich white color gives it an appearance of wholesome cleanliness that completes its sanitary qualities.

THE MANY USES OF VITROLITE

Vitrolite is largely used for toilet and shower partitions—wainscoting in office and public buildings and residences and for wall surfacing in the operating, utility and diet rooms of hospitals. It is also extensively used for splash boards and for table tops. Decorated Vitrolite may be had in large true surfaced panels in a number of artistic designs, fired in ceramic art colors, at 1800° Fahrenheit and may be used for friezes and borders in restaurants and lunchrooms and produces an artistic and pleasing effect. For wainscot cap decorated Vitrolite affords pleasing contrast and adds a note of distinctiveness. Note the illustration of decorated Vitrolite capping in the Great Northern Hotel toilet room featured on page 11.

HOW VITROLITE IS INSTALLED

The Vitrolite Company is so organized that it has operating construction shops in the principal cities of the country, with crews of trained specialists who are thoroughly experienced in the handling and installation of Vitrolite, which makes for efficient speedy and satisfactory work with the least possible attention on the part of the Architect. Vitrolite is attached to walls and ceilings with Vitro cement which is plastic and although holding the Vitrolite securely allows for readjustments due to settling.

Authentic data based on tests covering relative physical and chemical properties of *Vitrolite* and Marble.

VITROLITE is proof against organic acids as well as alkalis

VITROLITE is impermeable to stains of any character

EMERSON LABORATORY ANALYTICAL AND INDUSTRIAL CHEMISTS SPRINGFIELD, MASSACHUSETTS			
145 CROSBY STREET			
Samples Marble			
Submitted by The Vitrolite Company, Chicago, Ill.			
Received July 2, 1917.			
Test	White Marble	Gray Marble	Vitrolite
Relative Water Absorption in 24 hours	12.00	7.31	Non-Absorbent
Acid Test Tenth Normal Hydrochloric acid for 30 minutes	Deep Etching Acid All neutralized	Deep Etching Acid all neutralized	No Action No Acid used up
Staining with Urine	Slight etching	Slight etching	No effect
Staining with Blood	No effect	No effect	No effect
Staining with Red Ink	A large diffuse stain	A smaller stain than with white marble	No effect
EMERSON LABORATORY <i>Kearney Emerson</i>			

The following data was compiled as a result of tests conducted by Mr. F. M. McCullough, Assistant Professor of Materials, Carnegie Institute, Pittsburgh, Pa.:

VITROLITE vs. MARBLE

CROSS-BENDING TEST

In cross-bending, the specimen was carefully placed on two supports and the load applied at the center until the specimen failed.

	Width in inches	Depth in inches	Span in inches	Load in Lbs.	Modulus- Lbs. of per Rupture Sq. in.
VITROLITE	3.016	1.018	8	1,625	6,240
Olivo Marble	3.067	.933	8	250	1,120..
Light Cloud Vermont Marble ...	3.02	.937	8	280	1,270
English Vein Italian Marble	3.007	.901	8	435	2,140
Grey Tennessee Marble	3.00	.866	8	350	1,870
VITROLITE	3.00	.428	4	475	5,145
English Vein Italian Marble	3.01	.479	4	215	1,870
Grey Tennessee Marble	3.033	.485	4	305	2,560

COMPRESSION TEST

This compression test was performed by slowly increasing the load on the specimen until it crushed.

Material	Cross- Section in Sq. Inches	Height in Ins.	Load Total Unit in Lbs.	Load in Sq. in.
VITROLITE	1.084	1.069	.974	30,000 25,900
VITROLITE	1.0665	1.052	.975	38,690 34,500
Olivo Marble...	.982 x .984	.951	9,540	9,880
Olivo Marble...	.876 x .965	1.015	5,370	6,360
Grey Tenn. Marble998 x .862	1.049	14,390	16,720
Italian English Vein Marble..	1.0725 x .928	1.042	14,710	14,770
*Italian English Vein Marble.	1.016	1.0095	.435	11,450 11,160
VITROLITE	1.030	1.030	.467	49,000 46,200
Italian English Vein Marble ..	1.007	1.044	.456	18,260 17,350
Meadow Tenn. Marble999 x .977	.481	18,370	18,810

The total load is the load registered by the machine when the specimen failed; the unit load is obtained by dividing the total load by the area of the cross-section. The results on * and * are double because of bearing surfaces.

New Features Embodied in the Vitrolite Toilet Partition

The
Vitrolite
Toilet
Partition

UNIT CONSTRUCTION

The new Vitrolite Toilet Partition is constructed in units that are standardized throughout and are factory assembled and fitted. All parts are interchangeable, therefore, giving the greatest degree of flexibility and permitting quick installations.

GRAVITY PRINCIPLE OF CONSTRUCTION

The new Vitrolite Toilet Partition is constructed in conformance with the principle of gravity settlement, the partition proper being held rigidly in slotted stiles, but without strain or stress at any point.

NO BOLTS, SCREWS OR HOLES DRILLED

A new and highly desirable feature is the entire absence of bolts, screws or nuts in the construction and there is not a single hole drilled in the Vitrolite.

SELF CONTAINED SHOCK ABSORBING CUSHION

The Vitrolite partition is 1-inch thick, double faced and contains within itself a shock absorbing cushion, which absolutely protects it against the most severe shocks.

FOLDING DOOR

The folding door is practical and durable and allows three square feet greater available area than with the ordinary door.

VITREOUS CHINA COVE BASE

The vitreous china base used makes a nice appearance and when set in a tile or terraza floor forms a sanitary coved joint.

CONSTRUCTION PREVENTS DAMAGE FROM FLOOR SETTLING

We go beyond the limit of any other manufacturer and agree to replace any partition which it can be proved has been damaged as a result of floor settlement. We are able to do this because we know that the construction is based on the right principle and will meet all conditions in actual service.

EASY READJUSTMENT

Anyone can easily readjust the partition to the proper floor level without disassembling, which is a new and highly desirable feature of the construction.

Specify *Vitrolite* for Sanitation, Permanence and Economy.

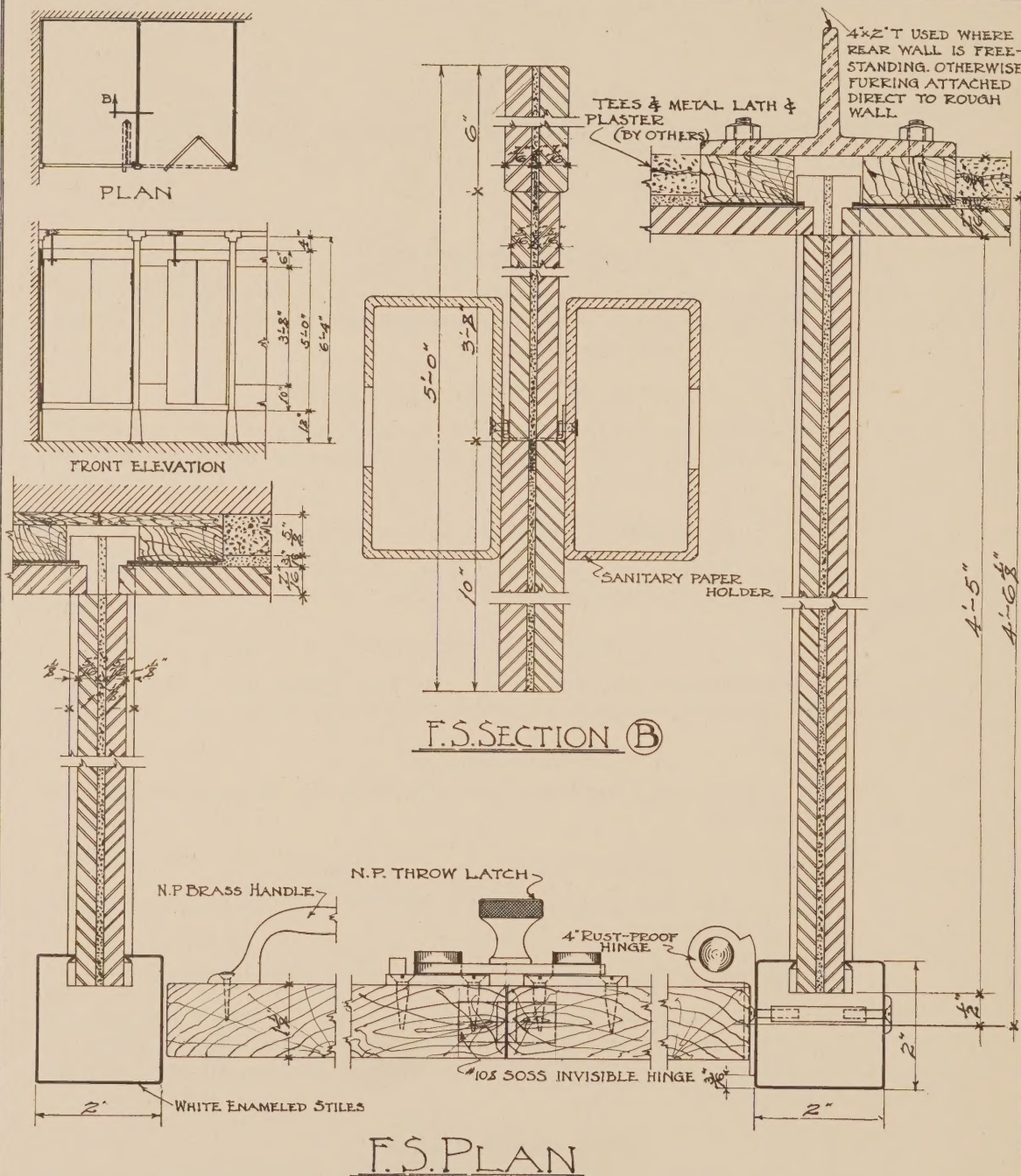


PLATE I

F.S. DETAILS OF TOILET CONSTRUCTION
GRAVITY PRINCIPLE TYPE

PATENT
APPLIED FOR

The **VITROLITE** Co.
CHAMBER OF COMMERCE
CHICAGO

*Specifications for Vitrolite Gravity
Principle Toilet Partition and Stiles*

All W. C. partitions and backs shall be of Vitrolite constructed in the following manner, in accordance with shop drawings submitted by the Contractor doing this work and subject to the approval of the Architect.

Vitreous China Standards:

Provide a vitreous china standard 12 inches high with sanitary cove at base and top recessed to receive 2-inch square section metal stile hereinafter described.

Stiles:

All stiles to be of sheet metal 2 inches square in section with spring lipped channel extending throughout its length. The lower end to telescope into the vitreous china standard at least 1 inch, the upper end finishing with a cast metal tee connection 6 feet and 5 inches above the finished floor.

Head Rail:

Provide head rail (of similar section to the stile) which shall serve as a trolley track or guide for the collapsible door described below. This head rail shall be secured in a workmanlike manner to the tee castings at the top of each stile. The hardware, such as spring butts, strikes, etc., shall be thoroughly secured. All metal work described above is to be rust-proofed and to receive four coats of celluloid enamel.

Vitrolite Partition:

Each partition to consist of a base 10 inches high, a panel 44 inches high and a cap 6 inches high; the base to be supported at the front by a vitreous china standard and at the wall to rest upon a Vitrolite base 12 inches high, which shall have been previously set along the wall. The various members of this partition shall be constructed as follows: Base and Cap shall be made up of two pieces of Vitrolite 7/16" thick mounted back to back with plastic cement upon a felt core. The vertical faces of the Vitrolite shall be grooved to a depth of 1/8-inch along the short ends. These grooves to engage the spring lipped channel of the stile at the front and to receive rust-proofed sheet metal strips at the end engaging the wall. The cap shall be similarly grooved and secured. The panels or die shall be made up of two 5/16-inch pieces of Vitrolite mounted in a similar manner. In assembling this partition sheet metal dowels shall be inserted into the top edge of the base imbedded in the plastic cement between the Vitrolite and the felt and shall extend into the plastic cement core of the die. In a similar manner the top edge of the die and bottom edge of the cap shall be doweled together, thus insuring the alignment of all members.

The partition shall be erected as above described and the use of bolts and angles or the drilling of holes will not be permitted.

Doors:

The doors if included in this contract shall be of collapsible type, hung by spring butts and hinged in the center by Soss hinges. The free swinging end of the door to be suspended from the head rail by a ball bearing trolley hanger of a special design. "In public work where statutes prohibit the specification of a single product the words "or other similar fire finished product," may be inserted.

All necessary holes for plumbing, etc. must be drilled by Vitrolite men.

Separate copies of specifications as well as details we will gladly furnish for specification writers upon request.

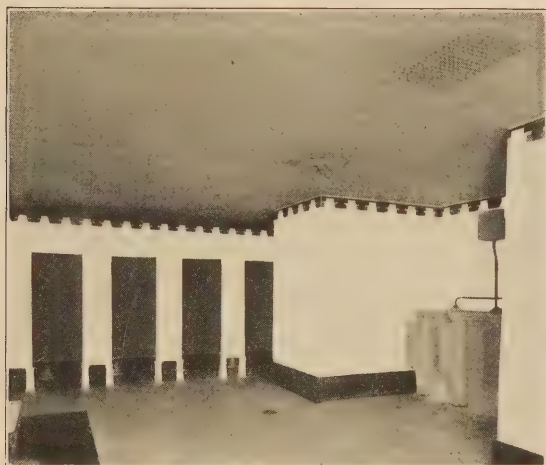
Photographs of Representative Installations of the new Vitrolite Toilet Partition



Toilet Room. Safety Deposit Vaults
Chamber of Commerce Building, Chicago.



New Vitrolite Toilet Partitions
Great Northern Hotel, Chicago



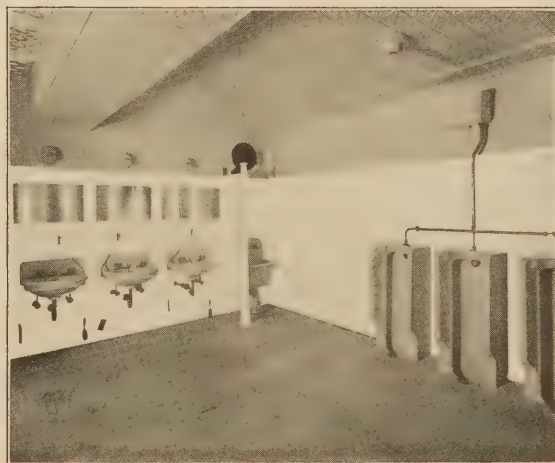
Toilet Room, Great Northern Hotel, Chicago
Showing Decorated Vitrolite Frieze



Washroom and Urinal, Great Northern Hotel
Showing Decorated Vitrolite Frieze



Girls Toilet Jefferson School
Red Wing, Minnesota



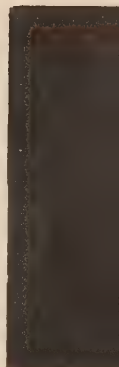
Washroom and Urinal, Safety Deposit Vault
Chamber of Commerce Building, Chicago



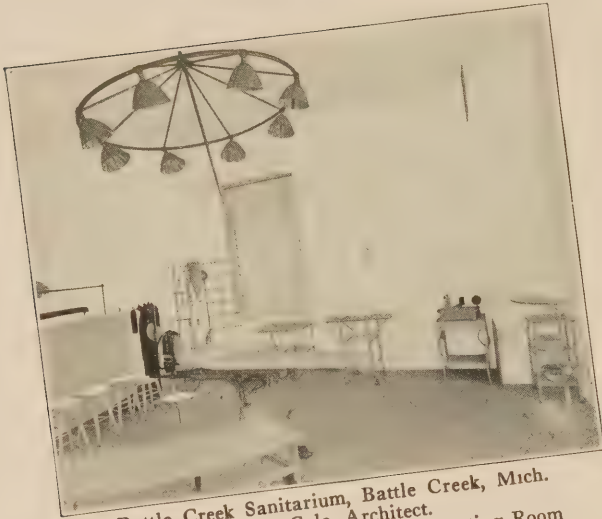
Vitrolite in the Modern Hospital

The Architect who specializes in the design of hospitals knows only too well the insistent demand for asepticism in everything that enters into the construction and equipment of an Operating, Diet or Utility room especially. Vitrolite is aseptic and can be installed in large slabs so that seams and joints are reduced to the minimum. No chemicals can possibly stain or react with it, it does not craze and can be sterilized without injury. Permanence is also an important feature of Vitrolite walls and ceilings as they will last a life time and always look clean and sanitary. Not only is redecorating expense eliminated, but the disturbing of the operating program is dispensed with. Vitrolite is widely used in hospitals for wainscoting in the bath rooms for toilet partitions—for wainscoting halls and corridors—for surfacing the walls and ceilings of operating, diet and utility rooms and for table tops in the dining rooms of asylums and sanitariums. We show details of recommended types of construction on page 19.

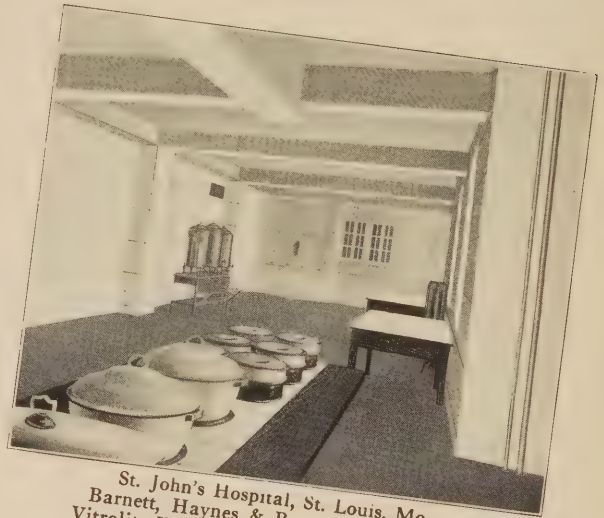
Vitrolite
in the
Modern
Hospital



A Few Representative Hospital Installations



Battle Creek Sanitarium, Battle Creek, Mich.
S. B. Cole, Architect.
Vitrolite Walls and Ceilings in Operating Room



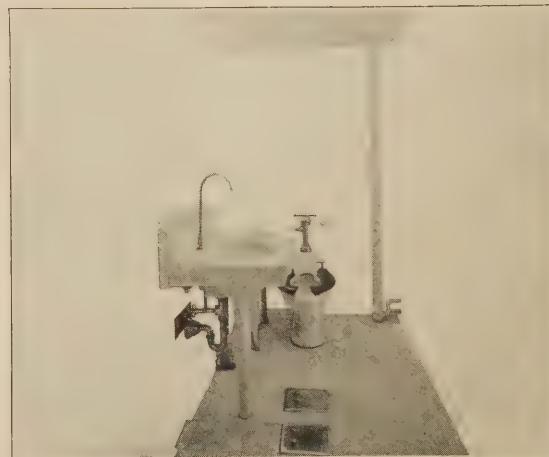
St. John's Hospital, St. Louis, Mo.
Barnett, Haynes & Barnett, Architects.
Vitrolite Walls and Ceiling in Diet Room.



Henry Ford Hospital, Detroit, Mich.
Albert Kahn, Architect.
Vitrolite Walls and Ceiling in Sterilizing Room.



Evanston Hospital, Evanston, Ill.
Meyer J. Sturm, Architect.
Vitrolite Wainscoting in Entrance.



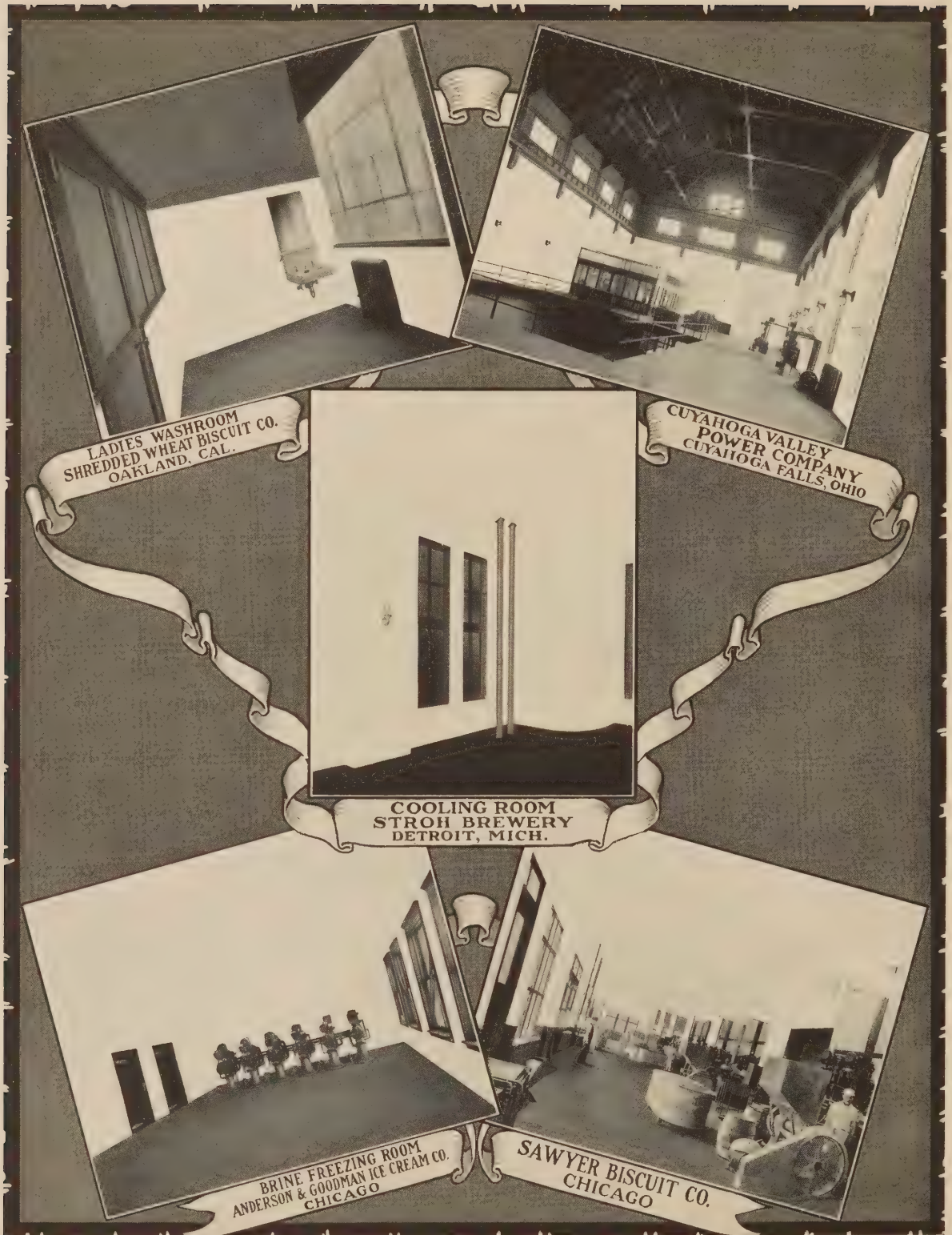
Fairview Hospital, Minneapolis, Minn.
Hewitt & Brown, Architects.
Vitrolite Wainscoting in Bathroom.

The Adaptability of Vitrolite for Wainscoting

Vitrolite is well adapted for use as a wainscot because it possesses the durable qualities of marble and in addition highly desirable sanitary features which the latter does not possess. A Vitrolite wainscot can be made to look as spotlessly clean after years of service as the day it was installed. It has an exceedingly high light reflecting factor which means economy in current consumed for lighting. It is also lighter in weight than marble.

Vitrolite can be quickly and easily washed at any time by merely sponging with water. It is impossible to stain it and acids and alkalis do not affect it. These practical considerations together with its pleasing appearance make it a satisfactory and economical wainscot.

Vitrolite
For
Wains-
coting
and many
other
Uses



The Many Uses of Vitrolite

We mention here and illustrate on the page opposite and one following, some of the many uses of *Vitrolite*. *Vitrolite* is unexcelled for toilet and shower partitions and toilet room wainscoting in clubs, office and public buildings and hospitals. It is equally well adapted for wainscoting in the halls and corridors of the class of buildings mentioned, as well as for apartment building entrances.

In residences there is nothing more likely to please the owner and reflect greater credit on the architect's judgment, than the selection of *Vitrolite* for the bathroom, kitchen and pantry walls and for table and cabinet tops.

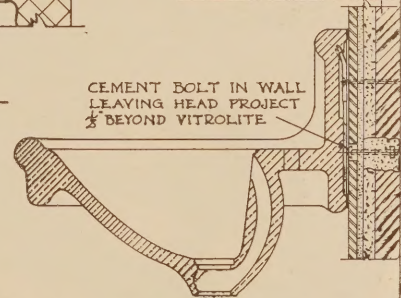
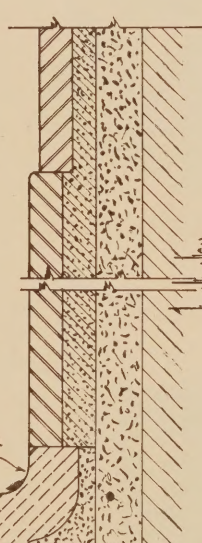
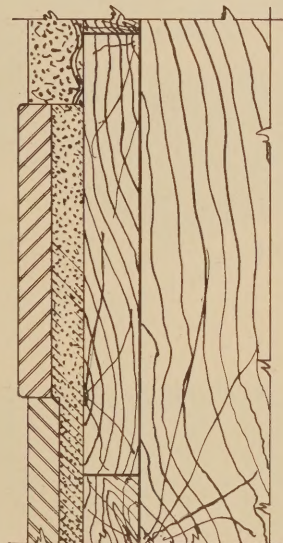
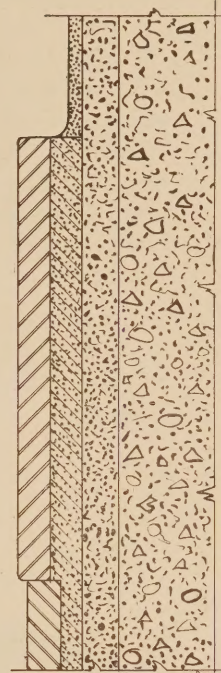
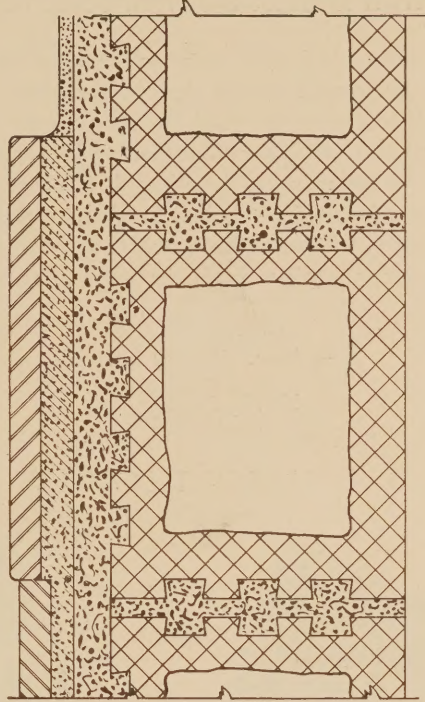
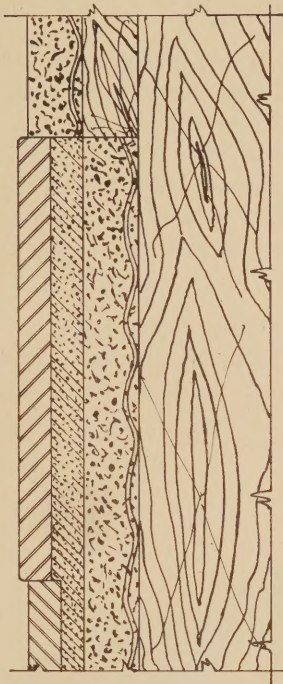
For light shafts *Vitrolite* claims consideration on the basis of its high light reflecting factor.

In the industrial field *Vitrolite* is used for laboratory walls and ceilings—for brine-freezing rooms in ice cream factories, for walls and ceilings in bakeries, for walls in electric power stations, for cooling rooms and refrigerators in breweries and for walls in creameries and dairies.

Where the architect is called upon to design interiors for markets, bakeries, restaurants and lunchrooms, he will find *Vitrolite* decidedly satisfactory for surfacing walls and ceilings, as well as for counters bulkheads and basing.

In barber shops in large buildings, *Vitrolite* is widely used for mirror frames and wainscoting because it is pleasing in appearance, sanitary and easy to keep spotlessly clean.

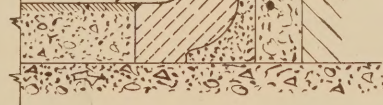




CEMENT BOLT IN WALL
LEAVING HEAD PROJECT
BEYOND VITROLITE

3" SCALE DETAIL SHOWING
FASTENING OF WASH BOWL
WHERE VITROLITE OCCURS

OHIO FLINT COVE
(BY OTHERS)
FIN. FLOOR



KEY TO MATERIALS

VITROLITE	
VITRO-CEMENT	
METAL LATH & PLASTER	
WOOD	
TILE	
CONCRETE	

PLATE V

F. S. DETAILS SHOWING WALL CON-
DITIONS FOR SECURING VITROLITE

The VITROLITE Co.
CHAMBER OF COMMERCE
CHICAGO

"A Vitrolite wainscot is impermeable to stains and acid resisting."

Vitrolite for Industrial Lunch Rooms, First Aid Rooms and Laboratories

The Architect is being called upon more and more in the Industrial field to design practical buildings as well as to recommend certain kinds of the most approved type of equipment. The employees lunch room is becoming more and more a necessary and vital part of every well equipped plant and we present here some illustrations that we believe would be of interest to the Architect. The many Industrial leaders using Vitrolite, after having carefully considered its merits implies its fitness for the use advocated. We shall be glad to cooperate with architects in planning lunch rooms or in connection with installations where Vitrolite is proposed for walls and ceilings in laboratories or first aid rooms. We mention the following users of Vitrolite.

American Tobacco Co.
National Lead Co.
National Cash Register Co.
Swift & Co.

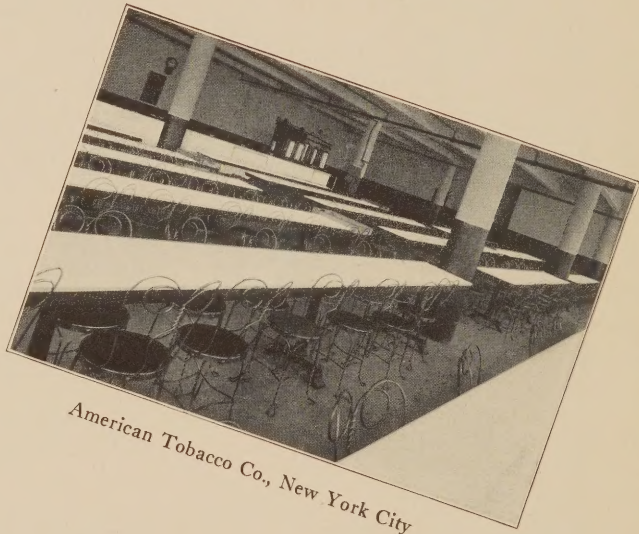
Wilson & Co.
Wm. Wrigley Co.
Illinois Steel Co.
Butler Brothers.

Jeffrey Manufacturing Co.
Dahlstrom Metal Door Co.
American Steel and Wire Co.
U. S. Playing Card Co.

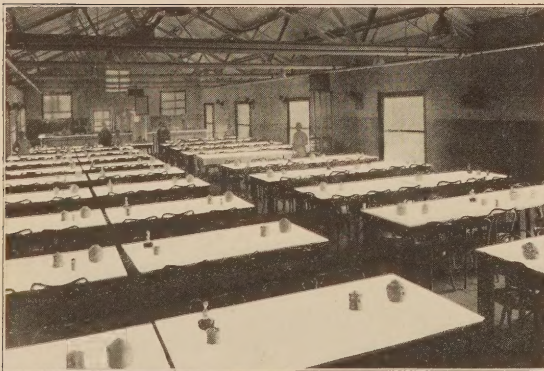
LUNCH ROOM VIEWS



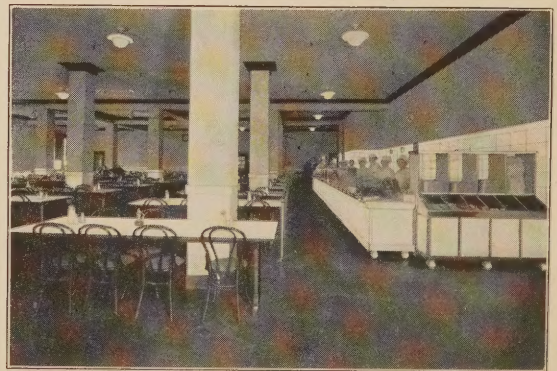
Butler Brothers, Chicago



American Tobacco Co., New York City



Jeffrey Manufacturing Co., Columbus, Ohio



Wilson & Co., Chicago

AT
8528
183
917

